PDI Work Plan Comment Discussion

Arkema Project Area

River Mile 7 West

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EPA Specific Comment 5—HxCDF Background

FS Appendix B

- Calculated risk percentages based on **measured fish tissue samples.**
- These percentages demonstrate the proportional risk associated with each D/F congener.
- PeCDF and TCDF are the primary risk drivers (>80 percent of the D/F risk in RM 6.5–7.5W).
- **HxCDF is about 8.3 percent of the RM 6.5–7.5W risk** based on these empirical data.

FS Appendix J

- Residual risk based on **modeled fish tissue values.**
- The sediment PTW concentration was apparently based on the modeled risk-based fish tissue concentrations. Can EPA confirm this?
- The food web model (FWM) used sediment concentrations to back-calculate corresponding fish tissue concentrations.
- The model shows that current fish tissue should exceed PTW threshold, but sample results do not support this
- Using the FWM back calculated values, HxCDF appears to have by far the highest risk, **essentially 100% of the RM7W risk**.

EPA Comment 5—HxCDF Fish Tissue Data

- The FWM derives fish tissue concentrations (output) from sediment concentrations (input).
  - No information regarding calibration of the model is available.
- **HxCDF fish tissue concentrations under baseline conditions are below the PTW tissue PRG in all fish samples (whole body and fillet) collected from RM 6.9 to 7.6.**
  - Fillet tissue concentrations were 1 to 3 orders-of-magnitude below the HxCDF PTW PRG.

EPA Comment 5—HxCDF PTW Threshold Approach

- Using other COC CULs as a surrogate for HxCDF PTW is consistent with the ROD and protective of human health and the environment.
  - The ROD allows risk associated with contaminants for which a relationship between fish and/or shellfish tissue and sediment concentrations could not be determined to be addressed by meeting CULs for other COCs.
  - This is the ROD approach for arsenic, hexachlorobenzene, mercury, BEHP, pentachlorophenol, and polybrominated diphenyl ether.
- **We would like to explore options for addressing HxCDF that recognize that this compound is not the significant risk driver at RM7W**.